PERMIT NO. HI 0021113

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. §1251 et seq.; the "Act"); Hawaii Revised Statutes (HRS), Chapter 342D; and Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55, Department of Health (DOH), State of Hawaii,

COUNTY OF HAWAII
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

(hereinafter PERMITTEE),

is authorized to discharge treated wastewater to the receiving waters named the Pacific Ocean through Outfall Serial No. 001 at Latitude 19°46'58" N and Longitude 155°05'09" W,

from its Papaikou Wastewater Treatment Plant located at 27-2138 Hawaii Belt Road, Papaikou, Island of Hawaii, Hawaii 96781

in accordance with the effluent limitations, monitoring requirements and other conditions set forth herein, and in the DOH "Standard NPDES Permit Conditions", that is available on the DOH, Clean Water Branch (CWB) website at: http://health.hawaii.gov/cwb/site-map/home/standard-npdes-permit-conditions/.

All references to Title 40 of the Code of Federal Regulations (CFR) are to regulations that are in effect on July 1, 2013, except as otherwise specified. Unless otherwise specified herein, all terms are defined as provided in the applicable regulations in Title 40 of the CFR.

This permit, including the Zone of Mixing, will become effective on **July 2, 2014**.

This permit, including the Zone of Mixing, and the authorization to discharge will expire at midnight, **June 1, 2019**.

Signed this **2nd day of June, 2014**.

(For) Director of Health

FINAL PERMIT
June 2, 2014

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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge treated wastewater from Outfall Serial No. 001. The discharge shall be limited and monitored as specified below.

Effluent Characteristics	Discharge Limitations[1]				Monitoring Requirements	
	Average Monthly	Average Weekly	Maximum Daily	Units	Measurement Frequency	Sample Type
Flow	[2]	[2]	[2]	MGD	Continuous/ Recorder[4]	--
Biochemical Oxygen Demand (BOD_5) (5-day @ 20 Deg. C)	30	45	[3]	mg/L	1/Week[4]	24-Hour Composite
	88	131	[3]	lbs/day		
	The average monthly percent removal shall not be less than 85 percent					
Total Suspended Solids (TSS)	30	45	[3]	mg/L	1/Week[4]	24-Hour Composite
	88	131	[3]	lbs/day		
	The average monthly percent removal shall not be less than 85 percent					

MGD – Million Gallons per Day

[1] Compliance with mass-based effluent limitations shall be determined using the following formula:
lbs/day = 8.34 * concentration (mg/L) * flow (MGD), where design flow = 0.35 MGD

[2] The Permittee shall monitor and report the average monthly, average weekly, and maximum daily flow.

[3] The Permittee shall monitor and report the parameter test results.

[4] The Permittee shall measure both influent and effluent flow. Both influent and effluent samples shall be taken for BOD and TSS, as specified in Part A.2 and A.3 of this Permit

Effluent Characteristics	Discharge Limitations[1]				Monitoring Requirements	
	Average Annual	Average Monthly	Maximum Daily	Units	Measurement Frequency	Sample Type
pH	Not less than 6.0 and not greater than 9.0			standard units	1/Week	Grab
Total Residual Chlorine	--	--	13	µg/L	1/Week	Grab
	--	--	0.04	lbs/day		
Enterococci	--	7[2]	104[3]	CFU/100 mL	5 Days/ Quarter[4,5]	Grab[6]
Turbidity	--	--	[7]	NTU	1/Quarter	24-Hour Composite

[1] Compliance with mass-based effluent limitations shall be determined using the following formula:
lbs/day = 8.34 * concentration (mg/L) * flow (MGD) where design flow = 0.35 MGD
[2] Effluent limitation expressed as a geometric mean (see footnote 5).
[3] Effluent limitation expressed as a single sample maximum.
[4] Report enterococci as a geometric mean and as a single sample.
[5] A minimum of five (5) samples shall be taken at equally spaced intervals or unequally spaced at five (5), six (6), seven (7), or eight (8) day intervals provided that the total period covered is between 25 and 30 days. The Permittee shall not collect consecutive samples on the same day of the week.
[6] Enterococci samples shall be analyzed using methods specified in 40 CFR 136.
[7] The Permittee shall monitor and report the parameter analytical test results.

Parameter	Discharge Limitations			Monitoring Requirements	
	Geometric Mean[1]	Single Sample Maximum	Units	Measurement Frequency	Sample Type
Ammonia Nitrogen	--	4,300	µg/L	1/Quarter[2]	24-Hour Composite
	--	12.6	lbs/day[3]		
Nitrate + Nitrite Nitrogen	--	[4]	µg/L	1/Quarter[2]	24-Hour Composite
	--	[4]	lbs/day[3]		
Total Nitrogen	--	[4]	µg/L	1/Quarter[2]	24-Hour Composite
	--	[4]	lbs/day[3]		
Total Phosphorus	--	[4]	µg/L	1/Quarter[2]	24-Hour Composite
	--	[4]	lbs/day[3]		

[1] To be evaluated on a calendar year.
[2] Both influent and effluent samples shall be taken, as specified in Parts A.2 and A.4 of this Permit.
[3] Compliance with mass-based effluent limitations shall be determined using the following formula:
lbs/day = 8.34 * concentration (mg/L) * flow (MGD) where design flow = 0.35 MGD
[4] The Permittee shall monitor and report the parameter test results.

2. For individual discharge parameters monitored in the influent and effluent, monitoring shall be conducted on the same day.

3. All influent and effluent monitoring shall be arranged so that each day of the calendar week is represented at least once every two (2) months for discharge parameters monitored once per week. If the Discharger cannot arrange monitoring as prescribed, the Discharger shall provide a written explanation of the reasons with the discharge monitoring report.

4. Effluent monitoring for ammonia nitrogen, nitrate + nitrite nitrogen, total nitrogen, total phosphorus, and turbidity shall be conducted on the same day that receiving water monitoring for said pollutants is conducted.

5. Samples taken in compliance with the monitoring requirements in Part A of this permit shall be taken at the following locations:

   a. Influent Monitoring, Monitoring Location INF: All influent samples shall be taken downstream of any additions to the trunk sewer, upstream of any in-plant return flows, and prior to treatment where representative samples of the influent can be obtained.

   b. Effluent Monitoring Location, Outfall Serial No. 001: All effluent samples shall be taken downstream from any additions to the facility, after all treatment process and any in-plant return flows or disinfection units, and prior to mixing with the receiving waters, where representative samples of the final effluent can be obtained.

B. WATER QUALITY CRITERIA

1. Basic Water Quality Criteria Applicable to All Waters

   a. The discharge shall comply with applicable water quality standards for receiving waters adopted by the DOH under HAR, Chapter 11-54, Water Quality Standards, effective December 6, 2013.

   b. The discharge shall not interfere with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife and allows recreational activities in and on the water.

   c. The discharge of treated wastewater through Outfall Serial No. 001 shall not cause the following water quality criteria to be violated:

      (1) All State waters shall be free from pollutants in concentrations which exceed the acute standards listed in HAR 11-54-4(b)(3). All State waters shall also be free from acute toxicity as measured using the toxicity tests listed in HAR 11-54-11, or other methods specified by the Director.

      (2) All State waters shall be free from pollutants in concentrations which on average during any 24 hour period exceed the chronic standards listed in HAR 11-54-4(b)(3). All State waters shall also be free from chronic toxicity as measured using the toxicity tests listed in HAR 11-54-10, or other methods specified by the Director.

      (3) All State waters shall be free from pollutants in concentrations which, on average during any 30-day period, exceed the "fish consumption" standards for non-carcinogens in HAR 11-54-4(b)(3). All State waters shall also be free from pollutants in concentrations, which on average during any 12-month period, exceed the "fish consumption" standards for pollutants identified as carcinogens in HAR 11-54-4(b)(3).

      (4) All waters shall be free of substances attributable to domestic, industrial, or other controllable sources of pollutants, include:

         i. Material that will settle to form objectionable sludge or bottom deposits;

         ii. Floating debris, oil, grease, scum, or other floating materials;

iii. Substances in amounts sufficient to produce taste in the water or detectable off-flavor in the flesh of fish, or in amounts sufficient to produce objectionable color, turbidity or other conditions in the receiving waters;

iv. High or low temperatures; biocides; pathogenic organisms; toxic, radioactive, corrosive, or other deleterious substances at levels or in combinations sufficient to be toxic or harmful to human, animal, plant, or aquatic life, or in amounts sufficient to interfere with any beneficial use of the water;

v. Substances or conditions or combinations thereof in concentrations which produce undesirable aquatic life; and

vi. Soil particles resulting from erosion on land involved in earthwork, such as the construction of public works; highways; subdivisions; recreational, commercial, or industrial developments; or the cultivation and management of agricultural lands.

C. ZONE OF MIXING LIMITATIONS

1. Zone of Mixing (ZOM)

The ZOM shall be established for the assimilation of secondary treated wastewater at a design flow of 0.35 MGD. The ZOM shall consist of the Pacific Ocean that falls within a circular radius of 3,050 feet centered about Outfall Serial No. 001. The discharge of treated wastewater through Outfall Serial No. 001 shall not cause the following water quality criteria to be violated in Class A Wet Open Coastal Waters beyond the ZOM:

Parameter	Units	Geometric mean not to exceed the given value[1]	Not to exceed the given value more than 10% of the time[1]	Not to exceed the given value more than 2% of the time[1]
Total Nitrogen	µg/L	150.00	250.00	350.00
Ammonia Nitrogen	µg/L	3.50	8.50	15.00
Nitrate + Nitrite Nitrogen	µg/L	5.00	14.00	25.00
Total Phosphorus	µg/L	20.00	40.00	60.00
Chlorophyll a	µg/L	0.30	0.90	1.75
Turbidity	NTU	0.50	1.25	2.00
pH	standard unit	Shall not deviate more than 0.5 units from a value of 8.1, except coastal locations where and when freshwater from stream, storm drain, or groundwater discharge may depress the pH to a minimum level of 7.0.		
Temperature	°C	Shall not vary more than one degree Celsius from ambient conditions.		
Dissolved Oxygen	% Saturation	Not less than 75 percent saturation		
Salinity	ppt	Shall not vary more than 10 percent from natural or seasonal changes considering hydrologic input and oceanographic factors.		

[1] To be evaluated on an annual basis.

The specific water quality criteria set forth in the table above may be exceeded within the boundaries of the ZOM and shall not constitute a violation of this permit. Compliance with the geometric mean shall be evaluated based on a calendar year.

D. RECEIVING WATER MONITORING PROGRAM REQUIREMENTS

The Permittee shall conduct receiving water monitoring at offshore stations, during periods of discharge to the receiving water, as described below. Receiving water monitoring is not required during months in which effluent is not discharged to the receiving water.

1. Offshore Water Quality Monitoring

Offshore water quality monitoring data are used to determine compliance with State water quality standards. Offshore stations shall be located using a land based microwave positioning system which affords a high degree of accuracy and precision (e.g., mini-ranger), or other means that allow reoccupation of the station within ±6 meters (e.g., GPS or DGPS).

The Permittee shall monitor at the following offshore stations:

Station	Latitude (NAD 83)	Longitude (NAD 83)
S-1	19° 47' 28"N	155° 05' 09"W
S-2	19° 46' 58"N	155° 04' 39"W
S-3	19° 46' 28"N	155° 05' 09"W
S-4 (Control Station)	19° 47' 56"N	155° 04' 53"W
S-5 (Control Station)	19° 46' 00"N	155° 04' 53"W

The following water quality parameters shall be sampled[4]:

Parameter	Units	Sample Type	Monitoring Frequency
Total Nitrogen	µg/L	Grab[1]	1/Six Months[2]
Ammonia Nitrogen	µg/L	Grab[1]	1/Six Months[2]
Nitrate +Nitrite Nitrogen	µg/L	Grab[1]	1/Six Months[2]
Total Phosphorus	µg/L	Grab[1]	1/Six Months[2]
Chlorophyll a	µg/L	Grab[1]	1/Six Months[2]
Turbidity	NTU	Grab[1]	1/Six Months[2]
pH	standard unit	CDP[3]	1/Six Months[2]
Dissolved Oxygen	% saturation	CDP[3]	1/Six Months[2]
Temperature	°C	CDP[3]	1/Six Months[2]
Salinity	ppt	CDP[3]	1/Six Months[2]

[1] At each monitoring station with water depths equal to or greater than 10 meters, grab samples shall be collected at 1 meter below the surface, mid-depth, and 2 meters above the bottom. At stations with water depths less than 10 meters, top and bottom samples of the water column shall be taken.

[2] The Permittee shall conduct ZOM monitoring once during the wet season (November 1st through April 30th) and once during the dry season (May 1st through October 31st) on the same days that effluent sampling is conducted.

[3] A continuous depth profile (CDP) is the presentation of water quality parameter concentrations at distinct intervals throughout the water column. Parameter shall be measured on a CDP basis, from within 1 meter below the surface to within 2 meters above the bottom at 2 meter intervals.

[4] Refer to Part D.4 for Annual Receiving Water Monitoring Program requirements.

Inability to conduct offshore monitoring due to inclement weather or hazardous conditions which may endanger the lives of the facility's personnel shall not constitute a violation of this permit.

Monitoring results shall be reported in monthly DMRs. The DMRs submitted shall include monitoring results and probable sources and an explanation of any exceedances.

2. Outfall Monitoring

At least once during the term of this permit, the Permittee shall inspect the outfall and submit the investigation findings to the Director. The outfall inspection shall include, but not be limited to, an investigation of the structural integrity, operational status, and maintenance needs. The Permittee shall include findings of the inspection to the Director in the annual wastewater pollution prevention report in Part E of this permit for the year the outfall inspection is conducted.

3. ZOM Dilution Analysis Study

a. Within three (3) years of the effective date of this permit, the Permittee shall conduct and submit to DOH a dilution analysis study which identifies minimum and average dilution at the edge of the ZOM (Stations S-1 through S-3). In addition, the ZOM Dilution Analysis Study shall verify the presence or absence of assimilative capacity for ammonia nitrogen based on receiving water data at and beyond the edge of the ZOM.

   (1) Within 180 calendar days of the effective date of this permit, the Permittee shall submit a ZOM Dilution Analysis Study Work Plan to DOH. The Work Plan shall provide a detailed discussion regarding the method by which minimum and average dilution shall be evaluated and specify a time frame for the analysis. In addition, the Work Plan shall include a discussion of the hydraulics of the ZOM, significant variables that impact available dilution within the ZOM, identify data necessary to

complete the dilution study, include a plan to acquire necessary data, and identify any known potential challenges to completing the study. The Permittee shall incorporate all comments from DOH into the Work Plan. Within nine (9) months of the effective date of this permit, the Permittee shall implement the Work Plan with any necessary revisions.

(2) Within two (2) years of the effective date of this permit, the Permittee shall provide an update to DOH on the status of the dilution analysis and provide any preliminary data and results available at that time.

(3) Within three (3) years of the effective date of this permit, the Permittee shall submit a final report to DOH which; summarizes the method and results of the ZOM Dilution Analysis Study, identifies and supports a minimum and annual average dilution at the edge of the ZOM, and verifies the presence or absence of assimilative capacity for ammonia nitrogen.

b. In accordance with 40 CFR Parts 122 and 124, this permit may be modified to include new effluent limitations or permit conditions based on information provided from the ZOM Dilution Analysis Study; or to implement new, revised, or newly interpreted water quality standards applicable to HAR, Section 11-54-6.

4. Annual Receiving Water Monitoring Programs

The Permittee shall submit an annual receiving water monitoring report by March 31st of each year. The annual receiving water monitoring reports shall summarize and discuss monitoring results for the previous year. Reports shall include, at a minimum:

a. A description of climatic and receiving water characteristics at the time of sampling (weather observations, floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling, tide height, etc.).

b. A description of sampling stations, including differences unique to each station (e.g., station location, sediment grain size, distribution of bottom sediment, rocks and shell litter, calcareous worm tubes, etc.). This ocean bottom information shall be recorded at least once per calendar year.

c. A record shall be kept of the individual(s) performing sampling or measurements. A description of the sample collection and preservation procedures used in the survey shall be included in the report.

d. A description of methods used for laboratory analyses. Variations in procedure may be acceptable, but any such changes shall be reported to the DOH before implementation. All such variations must be reported with the analytical results.

e. An in-depth discussion of survey results. All tabulations and computations shall be explained.

E. WASTEWATER POLLUTION PREVENTION PROGRAM

1. Annual Report

The Permittee shall submit an annual report summarizing critical parameters which impact the operations of the facility to the DOH by May 31 of each year, unless otherwise instructed by the DOH. The report shall include, at a minimum, an evaluation of critical parameters, including the following:

a. Flow;

b. BOD_5 loading;

c. TSS loading;

d. Toxic pollutants or impacts of septic wastes;

e. Growth potential of the service area;

f. Impact of new regulations;

g. Bypasses and overflows;

h. Effectiveness and condition of the collection system;

i. Treatment capacity based on additional information.

2. Flow Rate Notification

The Permittee shall notify the Director and the Regional Administrator in writing not later than 90 calendar days after the 30-day average dry weather discharge flow rate first equals or exceeds 75% of the actual treatment capacity of the facility as reported above in Part E.1.i. The report shall include:

a. The date on which the 30-day average discharge flow rate first equals or exceeds 75% of the actual treatment capacity of the facility;

b. An estimate of when the 30-day average discharge flow rate will equal or exceed the actual treatment capacity of the facility; and,

c. A schedule of compliance to provide additional treatment capacity before the 30-day average discharge flow rate equals the actual treatment capacity of the facility.

3. Implementation of the Schedule of Compliance for the Flow Rate Notification

   a. The Permittee shall comply with the provisions of the schedule of compliance after approval by the Director;

   b. The Permittee shall initiate contingency plans to provide additional treatment capacity not later than 90 calendar days following the date on which the 30-day average discharge flow rate equals or exceeds 85% of the actual treatment capacity of the facility as reported in Part E.1.i; and,

   c. Special exemptions to eliminate the requirement for a contingency plan may be granted by the Director. Exemptions from this requirement shall be requested in writing and may be made a part of the annual report. The Director shall notify the Permittee in writing of his decision.

F. SLUDGE/BIOSOLIDS REQUIREMENTS

1. Sludge Use/Disposal Requirements

   a. General Conditions and Requirements

      (1) Acceptable Sludge Use/Disposal Practices

         (a) The Permittee shall dispose of all sludge generated at the facility at a municipal solid waste landfill, at a sludge surface disposal site, by land application, or by transferring the sludge to another party for further treatment, use, or disposal in accordance with all applicable portions of 40 CFR Parts 257, 258, 503 and HAR, Chapters 11-58.1 and 11-62.

         (b) Storage of sludge for over two years from the time it is generated shall be considered to be surface disposal. The storage site shall meet all the requirements of a surface disposal site under 40 CFR 503 Subpart C and HAR, Chapters 11-58.1 and 11-62. If the Permittee desires to store sludge for longer periods of time prior to final disposal, the Permittee shall submit a written request to the EPA Regional Sludge Coordinator and Director containing the information required under 40 CFR Section 503.20(b).

         (c) The Permittee shall dispose of sludge containing more than 50 mg/kg of PCBs in accordance with 40 CFR 761.

         (d) If the Permittee desires to dispose of sludge using a method not listed above, the Permittee shall submit a request for permit modification to EPA Regional Sludge Coordinator and Director 180 calendar days prior to the commencement of the alternate disposal practice.

      (2) Duty to Mitigate

         (a) The Permittee shall be responsible for ensuring the following:

            (i) All sludge produced at its facility is used/disposed of in accordance with 40 CFR Parts 257, 258, 503, and HAR, Chapters 11-58.1 and 11-62, whether the Permittee uses/disposes of the sludge itself or transfers it to another party for further treatment, use, or disposal.

(ii) Subsequent preparers, appliers, or disposers of the sludge are informed of the requirements under 40 CFR Parts 257, 258, 503, and HAR, Chapters 11-58.1 and 11-62.

(iii) Sludge is not allowed to enter State waters, or to contaminate an underground drinking water source.

(iv) Sludge treatment, storage, use, and disposal do not create a public nuisance.

(v) Haulers who ship non-Class A sludge off-site for additional treatment, use, or disposal take all necessary measures to keep sludge contained.

(b) The Permittee shall take all reasonable steps to prevent or minimize any sludge use or disposal which has a likelihood of adversely affecting human health or the environment.

(3) Other Conditions

(a) The Director may promptly modify or revoke and reissue this permit to incorporate any applicable standard for sewage sludge use or disposal promulgated under the Act Section 405(d), or adopted under HRS, Chapter 342D, or HAR, Chapter 11-62, if the standard is more stringent than the standard in this permit or covers a pollutant or practice not covered in this permit.

(b) The sludge requirements in this part are supplemental to the other conditions of this permit. In the event of a conflict, those requirements more protective of the environment shall apply.

(c) The requirements in 40 CFR 503 are enforceable by the EPA independently of being included in this permit.

b. Sludge Limitations and Monitoring Requirements

(1) Sludge shall be limited and monitored by the Permittee as specified below:

(a) Sludge Disposed of in Municipal Solid Waste Landfills

Monitoring Parameter/Test Procedures	Limitation	Monitoring Frequency
Paint Filter Test (SW-846, EPA Method 9095B)	No "Free Liquids"[1]	1/Year
Toxicity Characteristic Leaching Procedure (TCLP) Test[2]	[2]	1/Year
Priority Pollutants[3]	N/A	1/Year

N/A = Not Applicable

[1] "Free Liquids" as defined in EPA Method 9095.

[2] The parameters to be tested by the TCLP test and their limitations are specified in 40 CFR 261.24, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic.

[3] Priority pollutants are listed under the Act Section 307(a).

(b) Sludge Disposed of in Surface Disposal Sites (Sludge-only Landfill or Disposal on Land Not for the Purpose of Improving Plant Growth)

Parameter	Limitation (Mg/kg)							Monitoring Frequency
	0<25 m	25<50 m	50<75 m	75<100 m	100<125 m	125<150 m	>150 m	
Arsenic[1]	30	34	39	46	53	62	73	[2]
Chromium[1]	200	220	260	300	360	450	600	[2]
Nickel[1]	210	240	270	320	390	420	420	[2]
TCLP Test[3]	[3]							1/Year
Priority Pollutants[4]	N/A							1/Year

m = Meter

N/A = Not Applicable

[1] The Permittee shall monitor for this parameter only if sludge is disposed of in a unit with no liner and leachate system. Limitations are based on the distance (meters) from the active sludge unit boundary to the nearest property line.

[2] Monitoring frequency shall be determined by the following table:

Annual Production, Dry Weight (Metric Tons/Year)	Monitoring Frequency
0 - 290	1/Year (November)
290 – 1,500	1/Quarter (Feb/May/Aug/Dec)
1,500 – 15,000	6/Year (Feb/Apr/Jun/Aug/Oct/Dec)
>15,000	1/Month

[3] The parameters to be tested by the TCLP test and their limitations are specified in 40 CFR 261.24, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic.

[4] Priority pollutants are listed under the CWA Section 307(a).

(c) Sludge that is Land-Applied (Added to Soil for the Purpose of Improving Plant Growth)

The Permittee shall obtain and comply with the Wastewater Management Individual Permit, issued by the DOH, Wastewater Branch.

(2) The Permittee shall develop a representative sampling plan for monitoring toxics reduction, including the number and location of sampling points.

(a) If sludge generated at the facility is land applied or disposed at a surface disposal site, the sampling plan shall also include pathogens and vector attraction reduction monitoring.

(b) If pathogen reduction is determined by time and temperature, the plan shall be designed to determine temperatures throughout the batch being treated.

(c) If windrow composting is used, temperature shall be measured at least once for each 150 feet of windrow, and include measurements at depths of 12 to 24 inches below the surface.

c. Requirements for Sludge Disposed of in Municipal Solid Waste Landfill

(1) The Permittee shall dispose sludge in municipal solid waste landfills that meet the requirements of 40 CFR 258; and HAR, Chapter 11-58.1.

(2) Sludge shall not contain "free liquids" as defined by EPA Method 9095B (Paint Filter Liquids Test).

d. Requirements for Sludge Disposed of in Surface Disposal Sites (Sludge-only Landfill or Disposal on Land Not for the Purpose of Improving Plant Growth)

(1) Sludge that is disposed of in a sludge-only landfill shall meet the general requirements, pollutant limits (for surface disposal sites without liners and leachate systems), management practices, and operational standards in 40 CFR 503 Subpart C and additional pollutant limits requested by the Director.

(2) The Permittee shall have a qualified groundwater scientist develop a groundwater monitoring program for the surface disposal site or certify that the placement of sludge on the site will not cause aquifer contamination.

e. Requirements for Sludge that is Land-Applied (Added to Soil for the Purpose of Improving Plant Growth)

The Permittee shall obtain and comply with the Wastewater Management Individual Permit, issued by the DOH, Wastewater Branch.

f. Notification Requirements

(1) If sludge other than exceptional quality sludge is shipped to another state or to Indian lands, the Permittee shall notify the permitting authorities in the receiving state or Indian land (the EPA Regional Office for that area and the State or Indian authorities) 60 calendar days prior to shipment.

(2) The Permittee shall notify the EPA Regional Sludge Coordinator and the Director of any non-compliance that may seriously endanger public health or the environment within 24 hours after becoming aware of the non-compliance. A written non-compliance report shall be submitted, postmarked, or faxed within five (5) working days after the Permittee becomes aware of the noncompliance.

(3) The Permittee shall report all other instances of non-compliance not reported under Part F.1.f.(2) at the time discharge monitoring reports are submitted as required by Part G of this permit.

g. Annual Report

By February 19th of each year, the Permittee shall submit an annual report on sludge management activities during the previous calendar year to the EPA Regional Sludge Coordinator and the Director. The report shall provide the following information:

(1) Total amount of sludge generated that year and a breakdown of the usage/disposal methods employed (in dry weight, metric tons).

(2) Results of all monitoring required by Part F.1.b.

(3) If sludge was disposed in a municipal solid waste landfill, then the Permittee shall include the following certification statement:

"I certify under the penalty of law, that the paint filter test and toxicity characteristic leaching procedure test requirements have been met, and that vector attraction reduction requirements have been met by the municipal solid waste landfill. This determination has been made under my direction and supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information used to determine that the necessary requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

(4) If sludge was disposed in a surface disposal site, the following information shall be included:

(a) Requirements specified in 40 CFR 503.27.

(b) Name and mailing address of surface disposal operator if different from Permittee.

(c) Location (street address and latitude and longitude) of surface disposal site.

(d) Results of groundwater monitoring, or a copy of a certification by a groundwater scientist (including the scientist's name, title, and phone number) that the placement of sludge at the surface disposal site will not cause aquifer contamination.

(5) If sludge was land-applied, the following information shall be included:

(a) Requirements specified in 40 CFR 503.17(a) for all facilities preparing sludge for land application or reference to that facility's report, if submitted to EPA separately.

(b) Names and addresses of all facilities receiving the non-exceptional quality sludge, including land appliers and those facilities providing further treatment/blending prior to land application.

(c) Location of land application sites of non-exceptional quality sludge (street address, latitude and longitude) and sizes of parcels.

(d) Crops grown, agronomic rate for the crops grown, and certification by the land appliers of non-exceptional quality sludge that the sludge was applied at a rate not exceeding the agronomic rate determined for each crop.

(e) Copies of other certification statements by land appliers of non-exceptional quality sludge.

(6) If sludge was stored, the following information shall also be included:

(a) Age of stored sludge.

(b) Name and mailing address of operator of storage site if different from Permittee.

(c) Location of stored sludge (street address, latitude and longitude).

(7) If sludge was disposed using other methods, descriptions of the methods employed and the locations (street address, latitude and longitude) of the usage/disposal sites shall be included.

(8) Annual reports shall be submitted to DOH through the CWB Compliance Submittal Form for Individual NPDES Permits and NGPCs. This form is accessible through the e-Permitting Portal website at: https://eha cloud.doh.hawaii.gov/epermit/View/home.aspx. You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool to locate the form. Follow the instruction to complete and submit this form. All submissions shall include a CD or DVD containing the downloaded e-Permitting submission and a completed Transmittal Requirements and Certification Statement for e-Permitting NPDES/NGPC Compliance Submissions Form, with original signature and date.

(9) A copy of the Annual report shall be submitted to EPA and DOH at the following address:

Regional Sludge Coordinator (WTR-5)
Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Wastewater Sludge Program Manager
Wastewater Branch
Environmental Management Division
Department of Health
919 Ala Moana Boulevard, Room 309
Honolulu, HI 96814-4920

G. REPORTING REQUIREMENTS

1. Schedule of Submission

   a. Effluent and Receiving Water Monitoring Programs

   Within 30 calendar days after the effective date of this permit, the Permittee shall submit updated/revised versions of the following to the Director per Part G.2.f of this permit.

   (1) Effluent Monitoring Program which complies with Part A of this permit

   (2) Receiving Water Monitoring Program which complies with Part D of this permit

   (3) The Program(s) shall include at a minimum, but not be limited to the following:

   (a) Sampling location map;
   (b) Sample holding time;
   (c) Preservation techniques;
   (d) Test method and method detection level; and
   (e) Quality control measures.

   The DOH reserves the right to require the Permittee to revise the approved program, as appropriate, pursuant toward compliance with the terms and conditions of this permit.

   Monitoring shall be conducted according to test procedures approved under 40 CFR 136 with detection limits low enough to measure the compliance with Parts A and C of this permit. For cases where the discharge limitation is below the lowest detection limit of the appropriate test procedure, the compliance shall be based upon the lowest detection limit of the method.

   If a test method has not been promulgated for a particular constituent, the Permittee may use any suitable method for measuring the level of the constituent in the discharge provided the Permittee submit a description of the method or a reference to a published method.

The Permittee shall continue to implement the current plans until the revised programs are submitted to the Director. The revised programs should be implemented beginning the month they are submitted. The Permittee shall address all comments regarding the plans to the Director's satisfaction.

2. Transmittal and Monitoring Results Reporting Requirements

   a. Certification of Transmittals

      Submit all information in accordance with HAR, Section 11-55-07(b), with the following certification statement by an appropriate signatory:

      "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations."

   b. Include "NPDES Permit No. **HI 0021113**" on each transmittal.

      Failure to provide the assigned permit number for this facility on future correspondence or transmittals may be a basis for delay of the processing of the document(s).

   c. Reporting of Discharge and Monitoring Results

      (1) All wastewater monitoring, and biosolids/sludge monitoring, sample preservation, and analyses shall be performed as described in the most recent edition of 40 CFR 136, unless otherwise specified in this permit. All receiving water monitoring, sample preservation, and analyses shall be performed as specified in this permit.

      (2) In accordance with 40 CFR 122.45(c), effluent analyses for metals shall be reported as total recoverable.

(3) Monitoring results shall be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1). The results of all monitoring required by this permit shall be submitted in a format which allows direct comparison with the limitations in Part A and other requirements of this permit.

(4) For the purposes of reporting, the Permittee shall use the reporting threshold equivalent to the laboratory's method detection limit (MDL). As such, the Permittee must conduct influent and effluent analyses in accordance with 40 CFR 136 and must utilize a standard calibration where the lowest standard point is equal to or less than the concentration of the minimum level (ML).

(a) The MDL is defined as the minimum concentration of an analyte that can be detected with 99% confidence.

(b) The ML is defined as the concentration in a sample equivalent to the concentration of the lowest calibration standard analyzed in a specific analytical procedure, assuming that all the method-specific sample weights, volumes, and processing steps have been followed. Where a promulgated ML is not available, an interim ML is calculated using a factor of 3.18 times the MDL.

Analytical results at or above the laboratory's MDL shall be reported on DMRs as the measured concentration. For analytical results between the MDL and the ML, the Permittee shall report in the comment section on the DMR the sigma (σ) value (determined by the laboratory during the MDL study). Analytical results below the laboratory's MDL shall be reported as "less than the MDL" (i.e., "< 10 µg/L").

(5) Should there be no discharges during the monitoring period, the DMR form shall so state.

(6) All receiving water data shall be submitted annually to EPA's Storage and Retrieval Date Warehouse (STORET) in accordance with Water Quality Exchange (WQX) specifications (or equivalent data base/submission guidelines, as directed by the EPA).

Receiving water data shall be submitted electronically, as directed by EPA, to the following address:

U.S. Environmental Protection Agency
Monitoring and Assessment Office, WTR-2
75 Hawthorn Street
San Francisco, CA 94105

d. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant at location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified in 40 CFR 136, the results of such monitoring shall be included in the calculation and reporting of the values required in the DMR form. The increased frequency shall also be indicated.

e. Submittal of Monitoring Results Using NetDMR

The Permittee shall submit DMRs required under this permit electronically using NetDMR. NetDMR is accessed from: http://www.epa.gov/netdmr.

DMRs shall be submitted electronically no later than the 28th day of the month following the completed reporting period. Once a Permittee begins submitting DMRs using NetDMR, it will no longer be required to submit hard copies of DMRs to the Director, unless otherwise requested by the Director.

f. Schedule of Submission

(1) The Permittee shall submit reports to the Director as specified below.

Report	Reporting Period	Report Due Date
Discharge Monitoring Report	1/Month	28th day of the month following completed reporting period
Sludge/Biosolids Annual Report	1/Year	February 19 of each year
Annual Receiving Water Monitoring Report	1/Year	March 31 of each year
Wastewater Pollution Prevention Program Annual Report	1/Year	May 31 of each year
ZOM Dilution Analysis Study Work Plan	1/Permit Term	180 days after permit effective date
ZOM Dilution Analysis Study Report	1/Permit Term	3 years after permit effective date

Signed copies of monitoring and all other reports required by this permit, except those described in Part G.2.e of this permit, shall be submitted to the Director through the CWB Compliance Submittal Form for Individual NPDES Permits and NGPCs. This form is accessible through the e-Permitting Portal website at: https://eha-cloud.doh.hawaii.gov/epermit/View/home.aspx. If not already registered, you will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool to locate the form. Follow the instruction to complete and submit this form. All submissions shall include a CD or DVD containing the downloaded e-Permitting submission and a completed Transmittal Requirements and Certification Statement for e-Permitting NPDES/NGPC Compliance Submissions Form, with original signature and date.

Duplicate copies of the sludge reports shall be submitted to the EPA as specified in Part F of this permit.

(2) The Permittee shall submit reports to the Director as specified below.

Report	Reporting Period	Report Due Date
Offshore Water Quality Monitoring	1/Six Months[1]	28th day of the month following the completed monitoring period
STORET (or equivalent) Data Submission Report (Submit to EPA only)	1/Year	March 31 of each year

[1] Reporting period (DMR due by January 28th and July 28th of each year).

Signed copies of monitoring and all other reports required by this permit, except those described in Part G.2.e of this permit, shall be submitted to the Director through the CWB Compliance Submittal Form for Individual NPDES Permits and NGPCs. This form is accessible through the e-Permitting Portal website at: https://eha-cloud.doh.hawaii.gov/epermit/View/home.aspx.

3. Reporting of Noncompliance, Unanticipated Bypass, or Upset

   The following requirements replace the 24-hour notice requirements for bypasses (Standard NPDES Conditions Section 17(d)(2)(B) and 40 CFR Section 122.41(1)(6)(ii)(A)) and upsets (Standard NPDES Conditions Section 18(c)(3) and 40 CFR Section 122.41(1)(6)(ii)(B)).

   a. Immediate Reporting

      (1) In the event of a bypass, upset, or sewage spill resulting in or contributing to a discharge to State waters, the Permittee shall orally notify the DOH at the time the Permittee's authorized personnel become aware of the circumstances, but no later than 24 hours after the event.

      (2) In the event of a bypass, upset, or sewage spill resulting in or contributing to a discharge of 1,000 gallons or more to State waters, the Permittee shall orally notify the DOH and the AP news wire services at the time the Permittee's authorized personnel become aware of the circumstances, but no later than 24 hours after the event.

      (3) In the event of an exceedance of a daily maximum discharge limitation, if any exist, the Permittee shall orally notify the DOH at the time the Permittee's authorized personnel becomes aware of the circumstances, but no later than 24 hours after the event.

   b. Contact for Oral Reports

      (1) The Permittee shall make oral reports during regular office hours (7:45 a.m. to 4:30 p.m.) to the DOH, Clean Water Branch (CWB) at 586-4309.

      (2) The Permittee shall make oral reports outside of regular office hours to the State-On-Scene Coordinator (SOSC) from the Office of Hazard Evaluation and Emergency Response (HEER) at 226-3799, or to the State Hospital Operator at 247-2191.

c. Written Submission

(1) For those non-compliances requiring immediate reporting, the Permittee shall submit a written non-compliance report. The Permittee shall submit the report to the DOH, CWB, through the CWB Compliance Submittal Form for Individual NPDES Permits and NGPCs as specified in Part G.2.f.(1) within five (5) working days after the Permittee's authorized personnel becomes aware of the noncompliance.

(2) The report shall contain a description of the non-compliance and its cause; the period of non-compliance, including exact dates and times; if the non-compliance has not been corrected, the anticipated time it is expected to continue; public notice efforts, if any; clean-up efforts, if any; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the non-compliance.

(3) The Director may waive the written report or the five (5) working day deadline on a case-by-case basis for spills, bypasses, upsets, and violations of daily maximum discharge limitations if the oral report has been received within 24 hours of the non-compliance or when the Permittee's authorized personnel becomes aware of the non-compliance.

d. Other Non-Compliance

The Permittee shall report all other instances of non-compliance not reported under Part G.3.a at the time DMRs are submitted as required by Part G.2 of this permit. The non-compliance reports shall contain the information requested in Part G.3.c.(2) of this permit.

4. Other Reporting Requirements

The Permittee shall comply with the reporting requirements of 40 CFR 122.41(l)(1) through 122.41(l)(5), and 122.41(l)(8) as incorporated by Standard NPDES Permit Conditions, Section 16. Parts G.1 and G.2 of this permit supersede the requirements of 40 CFR 122.41(l)(6) and 122.41(l)(7).

5. Types of Sample

a. "Grab sample" means an individual sample collected at a randomly-selected time over a period not exceeding fifteen (15) minutes.

b. "Composite sample" means a combination of at least eight (8) sample aliquots, collected at periodic intervals during the operating hours of the facility over a 24-hour period. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.

H. SPECIAL CONDITIONS

1. Wastewater treatment facilities subject to this permit shall be supervised and operated by persons possessing certificates of appropriate grade, as determined by the DOH. If such personnel are not available to staff the wastewater treatment facilities, a program to promote such certification shall be developed and enacted by the Permittee. Activities of this program shall be reported in the Annual Report in Part E of this permit.

2. The Permittee shall maintain in good working order a sufficient alternate power source for operating the wastewater treatment and disposal facilities. All equipment shall be located to minimize failure due to moisture, liquid spray, flooding, and other physical phenomena. The alternate power source shall be designed to permit inspection and maintenance and shall provide for periodic testing. If such alternate power source is not in existence, the Permittee shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power.

3. Schedule of Maintenance

   The Permittee shall submit a schedule to the Director at least 14 calendar days prior to any maintenance of facilities, which might result in exceedance of effluent limitations. The schedule shall contain a description of the maintenance and its reason; the period of maintenance, including exact dates and times; and steps taken or planned to reduce, eliminate, and prevent occurrence of noncompliance.

4. Waste Load Allocation (WLA) Implementation and Monitoring Plan

   The Permittee shall develop and submit a facility-specific WLA implementation and monitoring plan to the Director of Health (Director) when a Total Maximum Daily Load (TMDL), which specifies WLAs applicable to the Permittee's discharge, is approved by the EPA within one (1) year of notification of approval date.

5. Remedy or Penalty

   Nothing in this permit waives any remedy or penalty applicable under HRS, Chapter 342D.

6. This permit may be reopened and modified, in accordance with NPDES regulations at 40 CFR 122 and 124, as necessary, to include additional conditions or limitations based on newly available information.

7. The discharge of treated wastewater through Outfall Serial No. 001 shall not cause the following water quality criteria to be violated in marine recreational water:

   a. Raw or inadequately treated sewage, sewage for which the degree of treatment is unknown, or other pollutants of public health significance, as determined by the Director, shall not be present in natural public swimming, bathing, or wading areas. Warning signs shall be posted where human sewage has been identified as temporarily contributing to the enterococcus count.

I. LOCATION MAP, AND ZOM AND RECEIVING WATER LOCATION MAP

(See Figure 1)

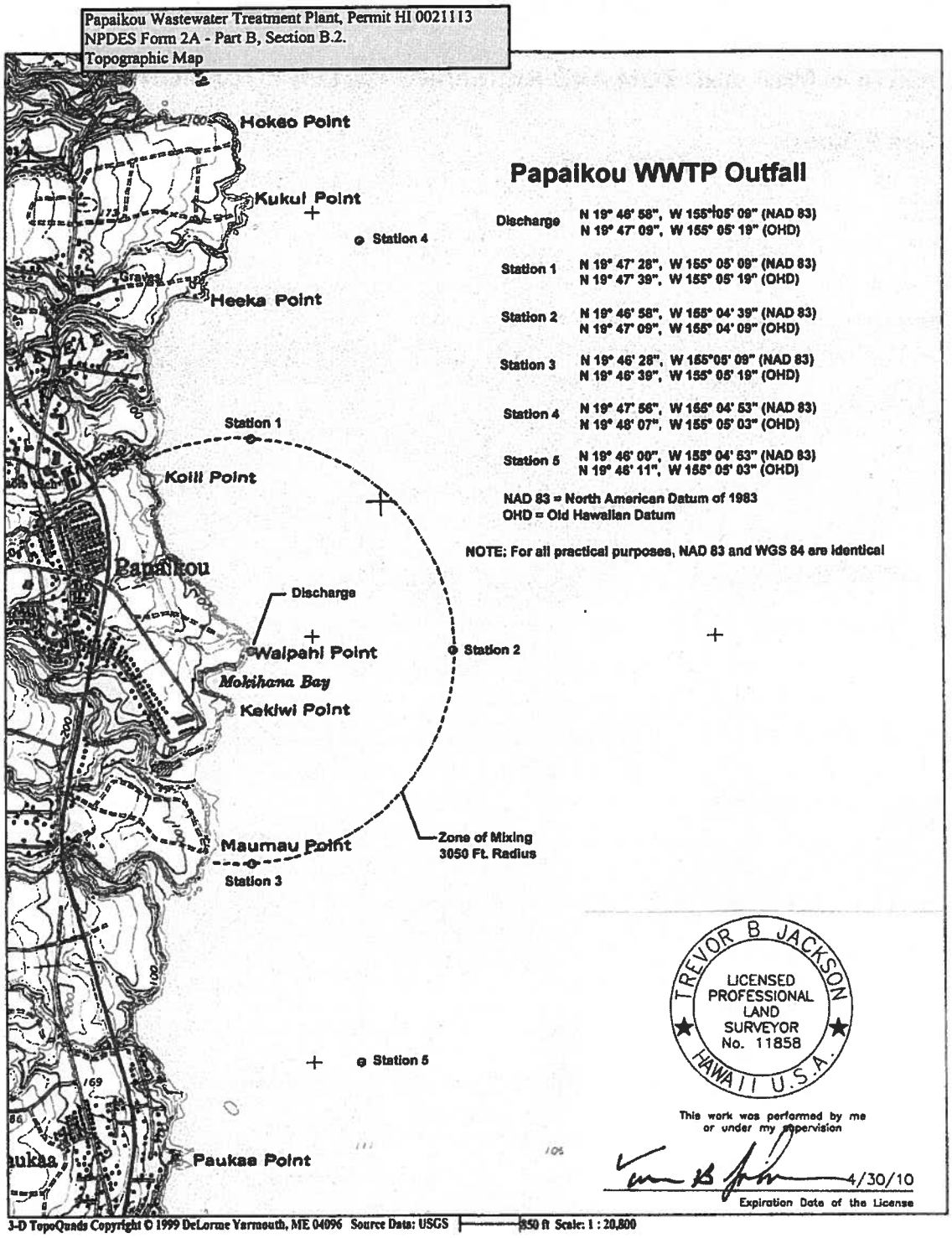

Figure 1 – Location and ZOM Monitoring Station Map